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GUIDE TO BETTER BOATING

**GREY WATER
MANAGEMENT
AND ENVIRONMENTAL
PRACTICES FOR
BOATERS**

 Ontario



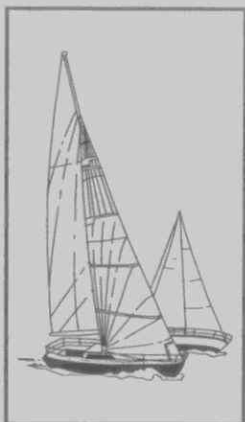
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Boating means different things to different people. Some people prefer "fuel-free" boats - canoes, kayaks, sailboats, or rowboats. Others prefer power boats. The type of boat you choose - whether to rent or buy - will certainly put a different flavour on your recreational experience, and those of people nearby. Your actions - while using the boat - can also have a profound effect on the surrounding natural environment and its wildlife.



Ontario's waterways can see some heavy boating traffic in the warm-weather months. Boaters can contribute to several environmental problems; such as excessive algae growth, water contamination, shore habitat damage, and noise pollution.

Ontario's Ministry of Environment and Energy has a mandate to improve water quality and maintain a healthy environment. This brochure aims to educate boaters about environmentally-friendly practices while cruising Ontario's waterways.

Grey water

Wastewater from sinks and showers is called "Grey" water. Grey water usually contains phosphorus (from detergents) and some disease-causing organisms. Too much phosphorus causes excessive algae growth,



sometimes choking-up small bays and restricted waterways. As the algae decompose, they rob the water of oxygen, causing damage to fish and wildlife. Boaters can help alleviate these problems by storing greywater on board, instead of discharging directly into the waters we enjoy so much. Even better, make sure the products that wash down your drains are safe for our environment. If you have room on your boat, install a grey water storage tank; or convert a spare fresh water tank. You can use any containers on board - plastic jugs (milk, juice, etc.), collapsible vinyl tanks - and then empty them on shore at the pump-out station. Try conserving water - you'll pump-out less often, and you'll reduce the amount of grey water that is discharged.

Only use phosphate-free and non-hazardous cleaning products (see recipes in this brochure). Never use any toxic cleaning agents. They poison the very waters we play in.

Environmentally-safe products:

Many products contain chemicals which are toxic to aquatic ecosystems. Chemicals are a hazard if they are toxic (poisonous), corrosive (strong acids or alkalis), flammable, explosive, or reactive (are not dangerous alone but can be if they are combined with other chemicals).

When buying products, be aware of these danger symbols and never use a product with these warnings on your boat:



Corrosive



Flammable



Explosive



Poison

Read labels. If a product doesn't list ingredients - beware!

Most marinas now carry a wide range of new, less harmful products, including soaps, boat cleaners, motor oils, paints and bottom coatings. If your marina is not offering such products, ask for a new line. Most marinas also recycle waste oil and will collect hazardous waste products such as antifreeze, paints and batteries for proper disposal. If your marina doesn't, then it's time to make a suggestion. Separate your trash and take it to shore for recycling, composting or proper disposal.

Antifreeze

Use non-toxic plumbers' antifreeze to winterize your boat. To reduce the amount used, drain systems thoroughly before adding antifreeze. Flush systems and collect antifreeze before launching. Save the antifreeze to reuse next fall.

Alternative cleaners:

You can make your own non-toxic cleaners with ingredients like *baking soda* (scours/polishes and deodorizes), *white vinegar* (cuts grease, disinfects), *lemon juice* (cuts grease, bleaches safely), *pure soap* (cleans everything), *borax* (cleans, deodorizes, scours and disinfects), and *cornstarch* (cleans, polishes and removes stains).

All-purpose cleaner

1 part baking soda
2 parts white vinegar
4 parts warm water

Scouring cleaner

1 part pure soap
1 part baking soda or Borax
2 parts warm water
(make a paste)

Polish for varnished furniture

30 ml olive oil

15 ml white vinegar

1 l of warm water

(Rub dry with a soft cloth)

Brass polish

Dip a clean rag in vinegar,
dust it with salt.

Rub the brass.

Polish with a clean cloth.

Dish detergent

1 part soap flakes

8 parts water

(Heat mixture over medium heat until boiling, stir occasionally to dissolve soap. Simmer for 10 minutes. Cool and store in a tightly covered container.)

Window cleaner

10 ml of white vinegar

1 l of water

(use a squeegee)



Black Water

Wastewater from the toilet is called "Black" water - and it must be stowed in a holding tank until pump-out. Dual systems with Y-valves

which allow toilet waste to go overboard are illegal and must be disconnected. Serious bacterial infections can occur if Black water is released into recreational waterways.

Use of a portable toilet on board is legal only if it is permanently secured to the boat and connected to a deck fitting for a shore-based pump-out.

Oils and gas

Fuel spills - even minor ones - do affect the aquatic environment. Oils and gas contain a mixture of different chemicals, some that can be very toxic to plants and animals - even at very low concentrations. Fuels will generally form a sheen or film on the surface of the water, but often will mix with floating debris and sink to the bottom, contaminating the sediment and the food chain.

Oils and gas may cause:

- waterfowl to drown, due to loss of buoyancy;
- waterfowl poisoning, from preening oil-matted feathers;
- fish kills (by coating gills);
- toxic effects on organisms living in the water or in the bottom sediment;
- fouled shorelines and beaches.

When filling the gas tank:

- moor the boat securely;
- put the nozzle all the way into the filler pipe;
- fill carefully to avoid blow-back;
- wipe up any spills; don't overfill;
- allow some room for gas to expand inside the tank in hot weather; and
- turn on the blower for at least 5 minutes and check for vapour and odours.

Oil and gas absorbers:

When cleaning the bilge, try using one or two "bilge pillows" to absorb petroleum products such as oil, transmission fluid, diesel or gas. They will not absorb water. When you pump out the bilge water, it will be much cleaner and safer for the environment. Look for them at your marina.



Water conservation

By reducing the amount of water you use, less wastewater will be pumped out - thus reducing the burden on the sewage treatment facilities, and your wallet. Since boaters are limited by the capacity of their freshwater tanks, it is wise to conserve water.



1. It may seem obvious, but...turn taps off tightly, and repair leaky ones. A leaky tap losing one drop per second wastes more than 25 litres of water each day.
2. Rinse dishes in a tub of clean water, rather than running your tap.
3. Turn the tap off while you wash your hands, brush your teeth, or shave.
4. Install a water-saving showerhead, and take shorter showers.

Prop wash damage

In shallow water, near shorelines or in confined bays, your propeller wash or wake can disrupt fish habitat and spawning grounds. Prop wash can also cause shoreline erosion and damage wildlife habitat along wetland edges. Large wakes can harm smaller boats, docks and docked boats, and endanger children playing at the water's edge. Please slow down. Remember, you are legally responsible for all damage caused by your wake.

Noise pollution

Ontario's waterways play host to a variety of boaters. As a result, conflicting goals sometime arise: some seek serenity, others speed, and some simply want to get from A to B. Please consider fellow boaters, the wildlife that surrounds you, and nearby cottagers (or home owners). Unnecessary noise can be offensive to some.

Other contacts:

Ministry of Environment and Energy

For more information about water quality, water-related policies and regulations, water conservation, pollution prevention, or for a list of marinas with pump-out facilities, call 1-800-565-4923, or write to the Public Information Centre, 135 St. Clair Ave. W., Toronto, Ontario, M4V 1P5.

Ministry of Natural Resources

For information on zebra mussels, fish habitat, and boating regulations, please call (416) 314-2000, or write to the MNR Information Centre, Room M1-73, MacDonald Block, 900 Bay St., Toronto, Ontario, M7A 2C1.

Environment Canada

For information about water, or water conservation, call 1-800-668-6767, or write to the Enquiry Centre, Environment Canada, Ottawa, Ontario, K1A 0H3.

Canadian Power and Sail Squadrons

This is an organization of volunteer recreational boating enthusiasts dedicated to increasing knowledge and skill of boaters through education. For more information, call 1-800-268-3578, or write CPS, 25 Golden Gate Court, Scarborough, Ontario, M1P 3A5.

Ontario Marina Operators Association

4 Cataraqui Street, Suite 211, Kingston, Ontario K7K 1Z7. (613) 547-6662

Canadian Coast Guard

For information on small vessel regulations and general boating safety, call the boating safety line, at 1-800-267-6687.



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